

REMARKS

The Applicants request reconsideration of the rejection.

The Applicants' representative thanks the Examiner for the courtesies extended during the office interview of June 17, 2008. As a result of the interview, the above amendments have been prepared to advance prosecution of the application. In particular, the amended claims emphasize the independent control of the claimed magnetic members that are disposed outside of the vessel, for magnetically controlling a relative position of the magnetic micro-particles with respect to the vessel. As now claimed in claim 1, the plurality of magnetic members are arranged and independently controlled to apply magnetic fields to the magnetic micro-particles in response to respective signals received by each of the magnetic members independently.

In addition, claim 1 has been amended to recite that each of the plurality of magnetic members is arranged to be set off by a corresponding one of the independently-received signals, in order of location from downstream of a solution flow introduced by a solution flow introducing means, after each of the plurality of magnetic members has been set on by a corresponding one of the independently received signals, in order of location from downstream of the solution flow. The solution flow introducing means was added at the suggestion of the Examiner.

The interview centered on the above features, and it is believed that there was at least tentative agreement that the rejections of record, including the rejections under 35 U.S.C. §112 would be withdrawn upon entry of the amendments. In particular, the objection to the drawings and the rejection of claims 1-9, 19 and 21 under 35 U.S.C. §112, first paragraph, are overcome by the removal of language

respecting a solution flow controlling unit and a magnetic member controlling unit. Although the Applicants believe that these features are understood in view of the express teachings of the solution flow and magnetic member control, it is believed that prosecution would be advanced by amending the language.

Further, the prior art rejections of the claims are overcome by the above amendments as follows.

Claims 1 and 21 were finally rejected under 35 U.S.C. §102(b) as being anticipated by Forrest et al., U.S. Patent No. 4,141,687 (Forrest). However, while Forrest may teach the switching on and off of magnets, there is no suggestion of controlling the state of the magnets from downstream of a solution flow, or of independent control of the magnets as claimed. In particular, Forrest does not teach the independent control of the magnetic members in response to respective signals received by each of the magnetic members independently, wherein each of the plurality of magnetic members is arranged to be set off by a corresponding one of the independently-received signals in order of location from downstream of the solution flow, after each of the plurality of magnetic members has been set on by a corresponding one of the independently-received signals in order of location from downstream of the solution flow.

Claims 1, 19, 2-4, 6-8 and 21 were finally rejected under 35 U.S.C. §103(a) as being unpatentable over Burd Mehta et al., PCT WO/00/50172 (Burd Mehta) in view of Forrest. Forrest has been distinguished above, and the Applicants note that Burd Mehta discloses a collection of particles by trapping with a retention element, but which is different from the claimed setting on and off magnetic members by independent control thereof in response to independently-received signals.

Accordingly, no combination of Burd Mehta and Forrest can be said to reach the invention claimed in claim 1.

Claim 5 was finally rejected under 35 U.S.C. §103(a) as being unpatentable over Burd Mehta in view of Forrest and Wang et al., U.S. Patent No. 5,795,470 (Wang). Claim 9 was finally rejected under 35 U.S.C. §103(a) as being unpatentable over Burd Mehta in view of Forrest and Harrison et al., U.S. Patent No. 6,432,290 (Harrison). These and the other dependent claims, however, inherit the patentable features of independent claim 1, and are thus patentable at least on the basis of those features.

In addition, new dependent claims 23-34 have been added, which are thus allowable as well. The separate patentability of these claims is also evident in the one-by-one collection of magnetic micro-particles by the on/off switching of the magnetic fields in response to corresponding ones of the independently-received signal (claim 23); the introduction of the solution into the vessel so as to convey the magnetic micro-particles one-by-one from the opening end of the vessel as the on/off switching of the magnetic fields releases the magnetic particle closest to the opening end of the vessel (claim 24); the introduction of a washing solution into the vessel before the plurality of magnetic members are set on and then off in order of location from downstream of the solution flow (claim 25); collection of an individual one of the magnetic micro-particles from an opening end of the vessel by the on/off switching of the magnetic fields in response to corresponding ones of the independently-received signals (claim 26); holding of the plurality of magnetic micro-particles in a single line in the vessel, wherein each magnetic micro-particle has a diameter that is larger than one-half of the inner diameter of the vessel (claim 27); and control of the magnetic

micro-particles so that a single one is collected individually from an opening end of the vessel by switching on the magnetic member that applies the magnetic field to control the position of the magnetic micro-particle that is most downstream of the plurality of magnetic micro-particles and closest to the opening end of the vessel; and then by switching off the magnetic member that applies the magnetic field to control the position of said most-downstream magnetic micro-particle, while retaining switched on the magnetic member that applies the magnetic field to control the position of the magnetic micro-particle that is next in line to said most-downstream magnetic particle (claim 28). Similar limitations are set forth in claims 29-34, which are dependent from claim 19 (reciting a plurality of non-magnetic micro-particles held by the vessel, wherein the magnetic micro-particles and non-magnetic micro-particles are arranged in a sequence within the vessel).

In view of the foregoing amendments and remarks, the Applicants request reconsideration of the rejection and allowance of the claims.

The Applicants' representative invites the Examiner to telephone him at the number below to discuss any aspect of the invention, including the above amendments.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the

deposit account of Mattingly, Stanger, Malur & Brundidge, P.C., Deposit Account No.
50-1417 (referencing attorney docket no. H&A-126).

Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.

_____/Daniel J. Stanger/
Daniel J. Stanger
Registration No. 32,846

DJS/sdb
(703) 684-1120